

# **IMMUNOLOGICALLY ACTIVE POLYPEPTIDES WITH ALTERED TOXICITY USEFUL FOR THE PREPARATION OF AN ANTIPERTUSSIS VACCINE**

## **ABSTRACT OF THE DISCLOSURE**

Immunologically active polypeptides with no or reduced toxicity useful for the preparation of an antipertussis vaccine. Method for the preparation of said polypeptides which comprises cultivating a microorganisms transformed with a hybrid plasmid including the gene/s which codes for at least one of said polypeptides in a suitable medium and recovering the desired polypeptide from the cells or from the culture medium.